AMENDMENTS TO THE CLAIMS

WHAT IS CLAIMED IS:

1. (Currently amended) A method of identifying a candidate beta catenin pathway modulating agent, said method comprising the steps of:

(a) providing a first assay system capable of detecting Protein Kinase C iota ~~(PRKC)~~ (PRKC- ι) expression comprising a ~~PRKC~~ PRKC-ι nucleic acid;

(b) contacting the assay system of step (a) with a test agent;

(c) measuring the expression of ~~PRKC~~ PRKC-ι in the presence or absence of the test agent;

(d) identifying a candidate beta catenin modulating agent by detecting a change in the expression ~~or activity~~ of ~~PRKC~~ PRKC-ι in the presence of the test agent compared with no test agent;

(e) providing a second assay system capable of detecting a change in the beta catenin pathway comprising cultured cells expressing ~~PRKC~~ PRKC-ι;

(f) contacting the assay system of step (e) with the candidate test agent of step (b);

(g) measuring the beta catenin pathway in the presence or absence of the test agent; and

(h) confirming that the test agent of step (b) is a candidate beta catenin modulating agent by detecting a change in the beta catenin pathway in the presence or absence of the test agent.

2. (Currently amended) The method of Claim 1, wherein the first assay system comprises cultured cells that express the ~~PRKC~~ PRKC-ι polypeptide.

3. (Previously presented) The method of Claim 2, wherein the cultured cells additionally have defective beta catenin function.

4. (Withdrawn) The method of Claim 1 wherein the assay system includes a screening assay comprising a PRKC polypeptide, and the candidate test agent is a small molecule modulator.

5. (Withdrawn) The method of Claim 4 wherein the screening assay is a kinase assay.

6. (Previously presented) The method of Claim 1, wherein the second assay system is selected from the group consisting of an apoptosis assay system, a cell proliferation assay system, an angiogenesis assay system, and a hypoxic induction assay system.

7. (Withdrawn) The method of Claim 1 wherein the assay system includes a binding assay comprising a PRKC polypeptide and the candidate test agent is an antibody.

8. (Currently amended) The method of Claim 1, wherein the first assay system includes an expression assay comprising a ~~PRKC~~ PRKC-ι nucleic acid and the candidate test agent is a nucleic acid modulator against PRKC-ι.

9. (Previously presented) The method of claim 8, wherein the nucleic acid modulator is an antisense oligomer.

10. (Previously presented) The method of Claim 8, wherein the nucleic acid modulator is a phosphorodiamidate morpholino oligomer (PMO).

11. (Previously presented) The method of Claim 1 wherein the cultured cells in the second assay system additionally have defective beta catenin function.

12. (Canceled)

13. (Withdrawn) A method for modulating a beta catenin pathway of a cell comprising contacting a cell defective in beta catenin function with a candidate modulator that specifically binds to a PRKC polypeptide, whereby beta catenin function is restored.

14. (Withdrawn) The method of claim 13 wherein the candidate modulator is administered to a vertebrate animal predetermined to have a disease or disorder resulting from a defect in beta catenin function.

15. (Withdrawn) The method of Claim 13 wherein the candidate modulator is selected from the 25 group consisting of an antibody and a small molecule.

16. (Canceled)

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Withdrawn) A method of modulating beta catenin pathway in a mammalian cell comprising contacting the cell with an agent that specifically binds a PRKC polypeptide or nucleic acid.

21. (Withdrawn) The method of Claim 20 wherein the agent is administered to a mammalian animal predetermined to have a pathology associated with the beta catenin pathway.

22. (Withdrawn) The method of Claim 20 wherein the agent is a small molecule modulator, a nucleic acid modulator, or an antibody.

23. (Withdrawn) A method for diagnosing a disease in a patient comprising:
obtaining a biological sample from the patient;
contacting the sample with a probe for PRKC expression;
comparing results from step (b) with a control;
determining whether step (c) indicates a likelihood of disease.

24. (Withdrawn) The method of claim 23 wherein said disease is cancer.

25. (Withdrawn) The method according to claim 24, wherein said cancer is a cancer as shown in Table 1 as having >25% expression level.